Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

IOWA JUDICIAL BRANCH
Administering justice under the law equally to all persons.

STATE OF IOWA
JUDICIAL RETIREMENT FUND

Actuarial Valuation Report
as of July 1, 2011

www.CavMacConsulting.com

TABLE OF CONTENTS

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

October 18, 2011

Mr. David Boyd
State of Iowa Judicial Retirement Fund
State Court Administrator's Office
1111 E. Court Ave.
Des Moines, IA 50319

Dear Mr. Boyd:

At your request, we have performed an actuarial valuation of the Iowa Judicial Retirement Fund prepared as of July 1, 2011. The major findings are included in this report. The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2011, to provide the Annual Required Contribution (ARC) and the accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the Entry Age Normal cost method. An asset smoothing method is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level dollar amount. The assumptions recommended by the actuary and adopted by the State Court Administrator are, in the aggregate, reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25 and 27.

While this is not the first valuation report prepared by Cavanaugh Macdonald Consulting LLC, it is the first valuation prepared using Cavanaugh Macdonald Consulting's valuation software (the July 1, 2010 valuation results were developed using Milliman's valuation software). As part of our transition work, we replicated the July 1, 2010 actuarial valuation. Results were well within acceptable limits, but there were some differences in the key valuation results. The normal cost rate at July, 1, 2010, as determined using CMC's valuation software, was 20.90% versus 21.21% shown in the July 1, 2010 valuation report. The actuarial accrued liability, calculated using CMC's valuation software, was $157.7 million compared to $156.0 million in the July 1, 2010 valuation report. These differences are neither unusual nor significant. It is very common for differences in valuation results to occur due to the use of different pension valuation software.

We have prepared the Schedule of Funding Progress and Trend Information, which are found in Section 5 of the report. All historical information that references a valuation date prior to July 1, 2010 was prepared by the previous actuarial firm.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In our opinion, in order for the System to operate in an actuarially sound manner, contributions equal to the ARC are necessary for future fiscal years. Assuming that these contributions are made to the System, from year to year in the future, at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Consulting Actuary

Brent A. Banister

Brent A. Banister, PhD, FSA, EA, FCA, MAAA
Senior Actuary

PB:BB/kc

SECTION I – EXECUTIVE SUMMARY

This report presents the results of the July 1, 2011 actuarial valuation for the State of Iowa Judicial Retirement Fund (System). The primary purposes of performing an actuarial valuation are to:

- determine the employer contribution rate required to fund the System on an actuarial basis;
- disclose asset and liability measures as of the valuation date;
- determine the experience of the System since the last valuation date; and
- analyze and report on trends in System contributions, assets, and liabilities over the past several years.

Section I of the report is a summary of the principal results of the valuation.

Section II of the report provides details of the assets and liabilities used in the actuarial valuation.

Section III of the report provides the calculation of the Annual Required Contribution, the Net Pension Obligation, and the Annual Pension Cost. Much of this information is necessary for compliance with Statements Number 25 and 27 of the Governmental Accounting Standards Board.

The Appendices provide a summary of the data, methods and assumptions used in the preparation of this report. The assumptions and methods used in our calculation are acceptable for purposes of GASB as well as for purposes of determining an appropriate level of contributions to be made to the fund.

The 2008 Legislature passed SF2424, which contains statutory reporting requirements for all statewide public retirement systems, including the Judicial Retirement System. This information is contained in the Addendum at the end of this report.

While this is not the first valuation report prepared by Cavanaugh Macdonald Consulting LLC, it is the first valuation prepared using Cavanaugh Macdonald Consulting's valuation software. The July 1, 2010 valuation results were developed using Milliman's valuation software. As part of our transition work, we replicated the July 1, 2010 actuarial valuation. Results were well within acceptable limits, but there were some differences in the key valuation results. The normal cost rate at July 1, 2010, as determined using CMC's valuation software, was 20.90% versus 21.21% shown in the July 1, 2010 valuation report. The actuarial accrued liability, calculated using CMC's valuation software, was $157.7 million compared to $156.0 million in the July 1, 2010 valuation report. These differences are neither unusual nor significant. It is very common for differences in valuation results to occur due to the use of different pension valuation software.

The valuation results provide a "snapshot" view of the System's financial condition on July 1, 2011. As of July 1, 2011, the System has an unfunded actuarial accrued liability (UAAL) of $55 million. The UAAL decreased by $2 million from last year's amount due to various factors. A more complete analysis of the change in the unfunded actuarial accrued liability from July 1, 2010 to July 1, 2011 is shown on page 14.

The highlights of the valuation are:

Funded Status	Actuarial Valuation Date July 1, 2011	July 1, 2010
Using Actuarial Value of Assets		
Actuarial Accrued Liability	$164,511,490	$156,029,125
Actuarial Assets	109,511,743	99,415,804
Unfunded Actuarial Accrued Liability	$ 54,999,747	$ 56,613,321
Funded Ratio	66.6%	63.7%
Using Market Value of Assets		
Actuarial Accrued Liability	$164,511,490	$156,029,125
Market Assets	111,571,876	91,321,799
Unfunded Actuarial Accrued Liability	$ 52,939,614	$ 64,707,326
Funded Ratio	67.8%	58.5%

The total actuarial required contribution in the 2011 valuation decreased slightly as a percent of payroll, but increased as a dollar amount. The State's actuarial contribution rate decreased from 31.38% in the 2010 valuation to 31.15% in the 2011 valuation. The statutory contribution rate is 30.60% of pay, resulting in a contribution shortfall of 0.55%, as shown below:

Required Contribution Rate	Actuarial Valuation Date July 1, 2011	July 1, 2010
1. Normal Cost	$ 5,577,516	$ 5,212,950
2. Amortization Payment	4,736,896	4,795,666
3. Interest	379,798	368,538
4. Total Contribution (1) + (2) + (3)	10,694,210	10,377,154
5. Expected Member Contributions	2,468,652	2,382,343
6. State Contributions (4) - (5)	$ 8,225,558	$ 7,994,811
7. State Contribution Rate	31.15%	31.38%
8. Statutory Contribution Rate	30.60%	30.60%
9. Shortfall	0.55%	0.78%

EXPERIENCE

July 1, 2010 – June 30, 2011

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2011. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and employers in the future to balance the System assets and liabilities.

Changes in the System's assets and liabilities impacted the change in the actuarial contribution rates between the July 1, 2010 and July 1, 2011 actuarial valuations. On the following pages each component is discussed.

ASSETS

As of July 1, 2011, the System had total funds when measured on a market value basis, of $112 million. This was an increase of $21 million from the July 1, 2010 figure of $91 million.

The market value of assets is not used directly in the calculation of contribution rates. An asset valuation method is used to smooth the effect of market fluctuations. See page 10 for the detailed development of the actuarial value of assets as of July 1, 2011.

The actuarial value of assets as of July 1, 2011, was $110 million. The annualized dollar-weighted rate of return for FY2011, measured on the actuarial value of assets was approximately 8.2%, and measured on the market value of assets was approximately 19.9%, net of investment expenses. The components of the change in the market and actuarial value of assets for the System (in millions) are set forth below.

	Market Value $(millions)	**Actuarial Value $(millions)**
Net Assets, July 1, 2010	$91	$99
· Employer and Member Contributions	11	11
· Benefit Payments and Expenses	(9)	(9)
· Investment Income	19	9
Net Assets, July 1, 2011	$112	$110
Estimated Rate of Return	19.9%	8.2%

Due to the strong return on the market value of assets for FY2011 (about 20%), the return on the actuarial value of assets was greater than the assumed rate of 7.5%. Due to the use of an asset smoothing method, there is about $2 million of net deferred investment gain that has not been recognized. Absent unfavorable investment experience in future years to offset the recognition of the deferred gain, it will flow through the asset smoothing method.

LIABILITIES

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial accrued liability (UAAL). The unfunded actuarial accrued liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest on the previous balance of the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability as of July 1, 2011 is shown below:

Actuarial Accrued Liability	$ 164,511,490
Actuarial Value of Assets	109,511,743
Unfunded Actuarial Accrued Liability	$ 54,999,747

Factors influencing the UAAL from year to year include actual experience versus that expected based on the actuarial assumptions (both asset and liability), changes in actuarial assumptions, procedures or methods and changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (fiscal year 2011). There was an experience gain on both the actuarial value of assets and on the actuarial liabilities. There was no change in the actuarial assumptions and methods.

The UAAL decreased from $57 million on July 1, 2010 to $55 million on July 1, 2011. The Fund experienced a total actuarial gain of $2 million for the year ending June 30, 2011. Actuarial experience (gain or loss) is measured by comparing the expected UAAL (developed using the actuarial assumptions) and the actual UAAL. Several factors contributed to the change in the UAAL:

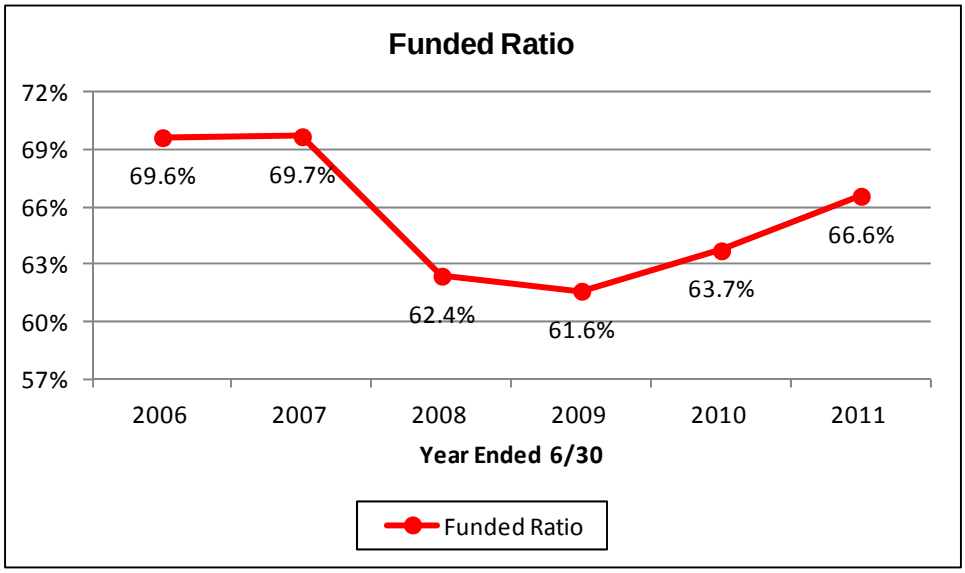
- The return on the actuarial value of assets was approximately 8.2%, which is higher than the actuarial assumption of 7.5%. This resulted in an actuarial gain of about $700,000 which decreased the UAAL.
- There was an actuarial experience gain on liabilities of around $1.5 million, largely due to lower salaries at July 1, 2011 than expected, which decreased the actuarial liability.

Between July 1, 2010 and July 1, 2011 the change in the unfunded actuarial accrued liability for the System was as follow (in millions):

	$ millions
Unfunded Actuarial Accrued Liability, July 1, 2010	56.6
· effect of contributions less than the actuarial rate	0.2
· expected increase due to amortization method	(1.1)
· investment experience	(0.7)
· liability experience[1]	(1.5)
· change in actuarial software	1.7
· change in actuarial assumptions	0.0
· change in benefit provisions	0.0
· other actuarial experience	(0.2)
Unfunded Actuarial Accrued Liability, July 1, 2011	55.0

[1] Liability gain is about 0.9% of total actuarial accrued liability

An evaluation of the unfunded actuarial accrued liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both large numbers) is reflected. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded status, which is the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status is shown in the graph below:



CONTRIBUTION RATES

The funding objective of the System is to pay the normal cost rate plus the amortization of each piece of the unfunded actuarial accrued liability over a 25-year period commencing with the valuation date on which the base was created.

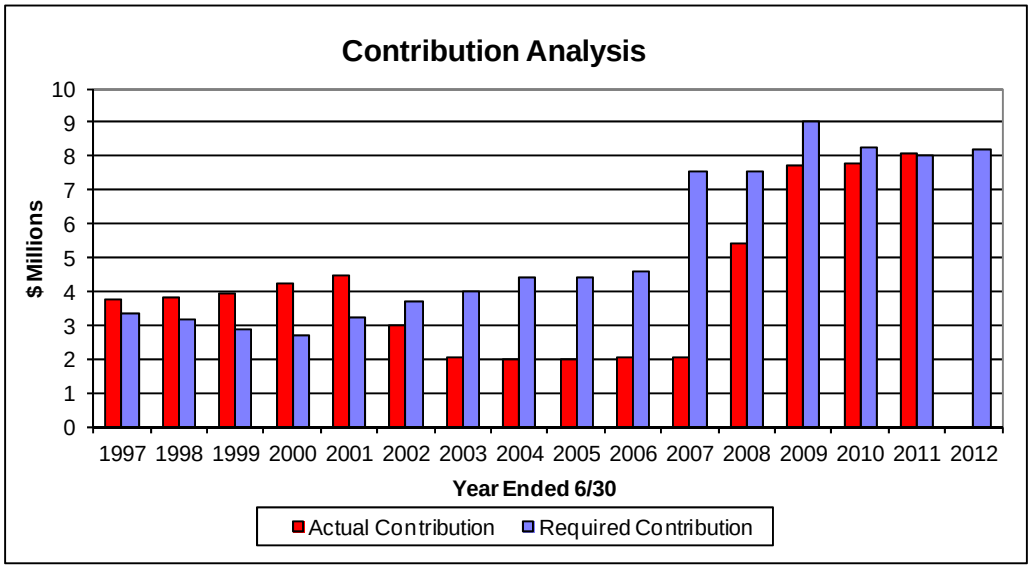
Under the Entry Age Normal cost method, the actuarial contribution rate consists of:

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date,
- an "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

	Plan Year Beginning	
	July 1, 2011	**July 1, 2010**
Prior year total contribution rate	40.73%	39.50%
· change due to asset (gains)/losses	(0.23%)	0.92%
· change due to other actuarial experience	(0.29%)	0.25%
· change due to change in actuarial software	0.24%	0.00%
· change due to actual contribution rate lower than actuarial rate	0.05%	0.07%
Current year total actuarial contribution rate	40.50%	40.73%
Member's contribution rate	9.35%	9.35%
State's actuarial contribution rate	31.15%	31.38%

Contributions to the System are made by the members and the state. The rates are set in statute. The member contribution rate was 8.70% of pay for FY2010 and increased to 9.35% for FY2011 and beyond. The employer contribution rate is 30.60% of pay so the total statutory contribution rate is 39.95%.

The following graph summarizes the actual and the actuarial employer contributions in recent years.



COMMENTS

Over the period from FY2002 through 2010, the State contributed far less than the actuarial contribution rate and the funded ratio of the System declined. The 2008 Legislature passed SF2424, which provided for significantly higher contributions to the system. However, the investment loss from FY2009 decreased the System's funded ratio and increased the actuarial contribution rate, offsetting some of the expected improvement in funding from the higher contributions. Due to the strong investment returns in FY2010 and FY2011, the investment loss from FY2009 has now been fully recognized in the asset smoothing method and the market value of assets is greater than the actuarial value. The impact of the remaining unrecognized loss from 2009 was eliminated in this valuation by the very strong investment return for FY2011.

Given the strong investment returns in the last two years, coupled with liability gains largely due to lower salary increases than expected based on the actuarial assumption, the System's funded status has improved. As a result, the actuarial contribution rate is now only slightly higher than the statutory contribution rate. If all actuarial assumptions are met in future years, the funded ratio of the System is expected to increase over time. As with most public retirement systems, the actual investment experience in future years will heavily impact the funding of the System and the sufficiency of the current statutory contribution rates.

STATE OF IOWA
JUDICIAL RETIREMENT FUND

SUMMARY OF PRINCIPAL VALUATION RESULTS

	Actuarial Valuation as of July 1, 2011	Actuarial Valuation as of July 1, 2010
1. SUMMARY OF DATA		
Active Judges	197	190
Senior Judges and Retired Senior Judges	56	56
Retired Judges	71	71
Beneficiaries of Deceased Judges	53	49
Inactive Vested Judges	8	5
Total Members	385	371
2. ACTIVE PARTICIPANT STATISTICS		
Total Compensation	$ 26,402,700	$ 25,479,600
Average Compensation	134,024	134,103
Average Age	56.8	56.9
Average Service	12.0	12.4
3. ASSET AND LIABILITY INFORMATION		
Actuarial Accrued Liability	$ 164,511,490	$ 156,029,125
Actuarial Value of Assets	109,511,743	99,415,804
Unfunded Actuarial Accrued Liability (UAAL)	54,999,747	56,613,321
Funded Ratio (Actuarial Value)	66.6%	63.7%
Market Value of Assets	111,571,876	91,321,799
Funded Ratio (Market Value)	67.8%	58.5%
4. CONTRIBUTION INFORMATION		
Normal Cost	21.12%	21.21%
UAAL Payment	18.60%	19.52%
Total Actuarial Contribution	40.50%	40.73%
Less Member Contribution	(9.35%)	(9.35%)
State Contribution	31.15%	31.38%
Less Statutory Contribution	30.60%	30.60%
Shortfall	0.55%	0.78%

STATEMENT OF CHANGES IN PLAN NET ASSETS

	Year End June 30, 2011	Year End June 30, 2010
Additions		
1. Contributions		
a. State	$ 8,101,876	$ 7,806,398
b. Members	2,475,578	2,222,015
c. Total Contributions (a + b)	10,577,454	10,028,413
2. Investment Income		
a. Interest	$ 1,395,611	$ 1,740,547
b. Dividends	977,203	531,303
c. Gain on Sale of Investments	16,629,148	8,489,547
d. Net Appreciation	(245,539)	(420,824)
e. Investment Expenses	(390,028)	(366,612)
f. Total Investment Income (a + b + c + d + e)	18,366,395	9,973,961
3. Total Additions (1c + 2f)	$ 28,943,849	$ 20,002,374
Deductions		
4. Deductions		
a. Benefit Payments	$ 8,680,508	$ 8,003,244
b. Administrative Expense	13,264	9,265
c. Total Deductions (a + b)	8,693,772	8,012,509
5. Net Increase (3 – 4c)	$ 20,250,077	$ 11,989,865
6. Net Assets Held in Trust for Pension Benefits		
a. Beginning of Year	$ 91,321,799	$ 79,331,934
b. End of Year	$ 111,571,876	$ 91,321,799

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

As of July 1, 2011

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. This methodology smoothes the volatility of market experience by only recognizing 25% of the difference between the expected value (based on the actuarial assumption) and the actual market value.

1. Actuarial Value of Assets as of July 1, 2010	$	99,415,804
2. Actual Contribution/Disbursements		
a. Contributions	$	10,577,454
b. Benefit Payments and Refunds		(8,693,772)
c. Net	$	1,883,682
3. Expected Value of Assets as of July 1, 2011 [(1) x 1.075] + [(2c) x $(1.075)^{1/2}$]	$	108,825,032
4. Market Value of Assets as of July 1, 2011	$	111,571,876
5. Difference Between Market and Expected Values (4) - (3)	$	2,746,844
6. Actuarial Value of Assets as of July 1, 2011 (3) + [(5) x 25%]	$	109,511,743
7. Actuarial Value of Assets divided by Market Value of Assets (6) / (4)		98.2%
8. Market Value of Assets less Actuarial Value of Assets (4) - (6)	$	2,060,133

PRESENT VALUE OF FUTURE BENEFITS
AS OF JULY 1, 2011

1. Active employees	
a. Retirement Benefit	$ 122,584,539
b. Withdrawal Benefit	24,269
c. Pre-Retirement Death Benefit	1,782,950
d. Total	$ 124,391,758
2. Inactive Vested Members	$ 2,905,476
3. Retirees and Beneficiaries	$ 86,757,124
4. Total Present Value of Future Benefits (1d) + (2) + (3)	$ 214,054,358

UNFUNDED ACTUARIAL ACCRUED LIABLITY
as of July 1, 2011

1. Present Value of Future Benefits	
a. Active Employees	$ 124,391,758
b. Inactive Employees	$ 89,662,600
c. Total	$ 214,054,358
2. Present Value of Future Normal Costs	$ 49,542,868
3. Total Actuarial Accrued Liability (1c) - (2)	$ 164,511,490
4. Actuarial Value of Assets	109,511,743
5. Unfunded Actuarial Accrued Liability	$ 54,999,747

ACTUARIAL BALANCE SHEET
July 1, 2011

ASSETS

Actuarial value of assets	$	109,511,743
Present value of future normal costs		49,542,868
Payments on Unfunded Actuarial Accrued Liability	$	54,999,747
Total Net Assets	$	214,054,358

LIABILITIES

Present Value of Projected Benefits:		
Active Members		
Retirement Benefits	$	122,584,539
Withdrawal Benefits		24,269
Pre-Retirement Death Benefits		1,782,950
Members with Deferred Benefits		2,905,476
Members Receiving Benefits	$	86,757,124
Total Liabilities	$	214,054,358

ACTUARIAL GAIN/(LOSS)
July 1, 2011

The actuarial gain/(loss) is comprised of both the liability and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of July 1, 2011.

1. Expected actuarial accrued liability		
a. Actuarial accrued liability at July 1, 2010	$	156,029,125
b. Normal cost at July 1, 2010		5,212,950
c. Benefit payments for fiscal year ending June 30, 2011		(8,693,772)
d. Interest at 7.5% on (a), (b), and (c)		11,773,033
e. Change in actuarial software		1,679,809
f. Expected actuarial accrued liability at July 1, 2011 (a) + (b) + (c) + (d) + (e)	$	166,001,145
2. Actuarial accrued liability at July 1, 2011	$	164,511,490
3. Actuarial accrued liability gain/(loss) (1f) - (2)	$	1,489,655
4. Expected actuarial value of assets		
a. Actuarial value of assets at July 1, 2010	$	99,415,804
b. Contributions for fiscal year ending June 30, 2011		10,577,454
c. Benefit payments and administrative expenses for fiscal year ending June 30, 2011		(8,693,772)
d. Interest at 7.5% on (a), (b), and (c)		7,525,546
e. Expected actuarial value of assets at July 1, 2011 (a) + (b) + (c) + (d)	$	108,825,032
5. Actuarial value of assets at July 1, 2011	$	109,511,743
6. Actuarial value of assets gain/(loss) (5) - (4e)	$	686,711
7. Net actuarial gain/(loss) (3) + (6)	$	2,176,366

SUMMARY OF AMORTIZTION BASES
At July 1, 2011

Date Established	Original Amount	Amortization Payment*	Outstanding Balance
July 1, 2009	$57,984,095	$4,838,876	$56,214,152
July 1, 2010	(517,789)	(43,210)	(510,172)
July 1, 2011	(704,233)	(58,770)	(704,233)
		$4,736,896	$54,999,747

* Each base is amortized as a level dollar amount over 25 years

DETERMINATION OF REQUIRED CONTRIBUTION RATE

1. Normal Cost	
Retirement Benefits	$ 5,464,700
Pre-Retirement Death Benefits	101,183
Withdrawal Benefits	11,633
Total	$ 5,577,516
2. Unfunded Actuarial Accrued Liability	
Actuarial Accrued Liability	$ 164,511,490
Actuarial Value of Assets	109,511,743
Unfunded Actuarial Accrued Liability (UAAL)	54,999,747
3. Amortization Payment on UAAL	$ 4,736,896
4. Total Contribution for Fiscal Year $[(1) + (3)] \times (1.075)^{1/2}$	$ 10,694,210
5. Projected Payroll for Fiscal Year	$ 26,402,700
6. Total Contribution as Percent of Payroll	40.50%
7. Member Contributions	9.35%
8. State Contribution (6) - (7)	31.15%
9. State Statutory Contribution Rate	30.60%
10. Contribution Rate Shortfall	0.55%

Schedule of Funding Progress
(In Thousands)

Actuarial Valuation Date	Actuarial Value of Assets[2] (a)	Actuarial Accrued Liability (AAL)[1] (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL/ Covered Payroll ((b-a)/c)
July 1, 2006	$86,110	$123,670	$37,560	70%	$24,094	156%
July 1, 2007	96,619	138,662	42,043	70%	24,426	172%
July 1, 2008	88,198	141,364	53,166	62%	26,663	199%
July 1, 2009	93,045	151,029	57,984	62%	26,811	216%
July 1, 2010	99,416	156,029	56,613	64%	25,480	222%
July 1, 2011	109,512	164,511	55,000	67%	26,403	208%

[1] Reporting for years before 2008 is based on the Projected Unit Credit cost method. For 2008 and later, the Entry Age Normal cost method is used.

[2] The actuarial value of assets was changed from pure market value to the expected value plus 25% of the difference between actual and expected value effective with the July 1, 2009 valuation.

Schedule of Employer Contributions

Year Ended	Annual Required Contribution	Percentage Contributed
June 30, 2006	$4,614,846	44%
June 30, 2007	7,560,981	27%
June 30, 2008	7,552,722	72%
June 30, 2009	9,024,252	86%
June 30, 2010	8,257,696	95%
June 30, 2011	7,994,811	101%

Notes to the Required Schedules:

1. The cost method was Projected Unit Credit for years ending June 30, 2009 and before. After that, the cost method has been Entry Age Normal.

2. The actuarial value of assets was equal to the fair market value for years ending June 30, 2008 and before. The expected value plus 25% of the difference between actual market value and expected value method has been used since year ended June 30, 2009.

3. Economic assumptions are as follows:
   Inflation rate of 3.25%
   Investment return rate of 7.50%
   Salary increases of 4.50% per year.
   Post-retirement benefit increases vary from 0.00% to 4.50%

4. Each year's change in the UAL is amortized over a closed amortization period of 25 years, determined as a level dollar amount.

Determination of Annual Required Contribution (ARC)

In Accordance with Statement No. 25 of the Governmental Accounting Standards Board

1. Normal Cost at July 1, 2011	$ 5,577,516
2. Amortization Payment	
a. Unfunded Actuarial Accrued Liability (UAAL)	$ 54,999,747
b. Amortization Amount at Beginning of Year	4,736,896
3. Total Annual Required Contribution [(1) + (2b)] x $1.075^{1/2}$	$ 10,694,210
4. Projected Payroll for FY2012	$ 26,402,700
5. Member Contribution Rate	9.35%
6. Expected Member Contributions for FY2012 (4) * (5)	$ 2,468,652
7. Annual Required Contribution (ARC)	$ 8,225,558

Development of the Net Pension Obligation and Annual Pension Cost

In Accordance with Statement No. 27 of the Governmental Accounting Standards Board

Determination of Net Pension Obligation

Net Pension Obligation as of July 1, 2010	$17,108,873
Annual Pension Cost for the Year Ended June 30, 2011	7,797,637
Employer Contributions for the Year Ended June 30, 2011	8,101,876
Net Pension Obligation as of June 30, 2011 (1) + (2) - (3)	$16,804,634

Determination of Annual Pension Cost for FY2012

1.	Annual Required Contribution (ARC)	$ 8,225,558
2.	a. Net Pension Obligation	$16,804,634
	b. Interest Rate	7.50%
	c. Interest on Net Pension Obligation	$ 1,260,348
3.	a. Net Pension Obligation	$16,804,634
	b. Amortization Factor (25 years)	11.98297
	c. Adjustment to ARC [(a) / (b)] x $1.075^{1/2}$	$ 1,454,015
4.	Annual Pension Cost (1) + (2c) - (3c)	$ 8,031,891

Actuarial Assumptions

Interest

7.5% per annum.

Mortality

RP-2000 Healthy Annuitant and Employee Mortality Tables with generational improvements and a one year age set back.

Turnover

1.0% per year for all participants under age 45. The termination rate experienced by the system has been very small, and this trend is assumed to continue.

Rate of Disablement; Disabled Life Mortality

No incidence of disability was assumed.

Salary Increases

Salaries will increase 4.5% per annum.

Incidence of Retirement

The following table indicates the assumed rate of retirement at each age.

Age	Rate
50 - 60	3%
61	4
62	10
63	5
64	5
65	20
66	15
67	15
68-71	20
72	100

Spouse's Benefit

85% of employees were assumed married, with the spouse four years younger.

Internal Revenue Service Limits on Recognized Pay

The limit is assumed to increase based on cost of living increases of 3.0% per year.

Retiring Judges Electing Senior Judge Status

80%, with 50% relinquishing at age 74.

Adjustment to Benefit for Senior Judges

Became Senior Judge	Adjustment
Before 1/1/93	4.5% for life
1/1/93 to 7/1/94	4.5% to age 78
7/1/94 and later	3.375% to age 78

Asset Valuation Method

The market value of assets, representing a fair value of System assets, may not necessarily be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens volatility in the market value while still indirectly recognizing market value. The specific technique follows:

Step 1: Determine the expected value of plan assets at the current valuation date using the actuarial value of assets from the prior valuation, the actuarial assumption for investment return and the actual receipts and disbursements of the fund for the previous 12 months.

Step 2: Subtract the expected value determined in Step 1 from the total market value of the Fund at the current valuation date.

Step 3: Multiply the difference between market and expected values determined in Step 2 by 25%.

Step 4: Add the expected value of Step 1 and the product of Step 3 to determine the actuarial value of assets.

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Individual Entry Age Normal method of funding.

Sometimes called the "funding method", this is a particular technique used by actuaries for establishing the amount of the annual actuarial cost of pension benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the System is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the System if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the System.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The **Unfunded Actuarial Accrued Liability** is the excess of the actuarial accrued liability over the actuarial value of System assets on the valuation date.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

Amortization Method

Level Dollar Amortization Method

The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.

Amortization Period

The amortization period on the existing UAL at July 1, 2009 was set to a closed 25-year period. A new amortization base is established each year, reflecting the difference in actual and expected experience. Each base established after 2009, is amortized over a new closed 25-year period.

APPENDIX B

SUMMARY OF PLAN PROVISIONS

STATE OF IOWA
JUDICIAL RETIREMENT FUND

Summary of Plan Provisions

An actuarial valuation involves the projection of the amount and timing of future benefit payments. Summarized below are the principal provisions of the plan which were used to estimate future benefit payments.

Credited Service	All years of service as a judge are credited.
Average Monthly Salary	Average monthly basic salary for highest three years as a judge. Each year's pay is limited to the compensation limit in Section 401(a)(17) of the Internal Revenue Code.
Accrued Benefit	The benefit payable at Normal Retirement Date which the judge has earned based on average salary and credited service to date.
Normal Form	The normal form of payment is an annuity payable for the life of the judge with one-half such amount payable to an eligible surviving spouse with a guarantee that payments totaling at least the amount of the judge's contributions will be made.
Eligible Spouse	A spouse is eligible if married to the judge for at least the one year preceding death.
Retirement Eligibility	Age 65 with a minimum of four years service or 20 years of service and age 50.
Mandatory Retirement Date	Age 72 for active judges. Age 78 for judges participating in the Senior Judge Program, unless reappointed at the discretion of the Supreme Court.
Monthly Retirement Benefit	Effective July 1, 2006, 3.25% of Average Monthly Salary times years of credited service subject to a maximum of 65% of final earnings. Prior to 2006 the formula was 3% of average monthly salary times years of service subject to a maximum of 50% until July 1, 1998, 52% from July 1, 1998 until June 30, 2000, 56% from July 1, 2000 to June 30, 2001, 60% effective July 1, 2001. Commencing July 1, 1992, a judge or a survivor of a judge who retired before June 1, 1977, shall receive a minimum monthly annuity payment of $500.
Disability Retirement	Upon total and permanent disability with a minimum of four years of credited service, the Judge receives the accrued benefit.
Vesting	100% vesting for voluntary terminations after 4 years of credited service (6 years prior to July 1, 2006). 100% vesting for Judges' contributions at all times.

Pre-Retirement Death Benefit

Four years of service required. The death benefit payable to an eligible spouse is one-half the accrued benefit at the date of death. The death benefit shall commence on the later of the date of death or the date the spouse reaches age 60.

Judge's Required Contribution Rate

July 1, 2008, 7.7% of pay. Effective July 1, 2009, 8.7% of pay. Effective July 1, 2010 and for each subsequent fiscal year until the System attains fully funded status, 9.35% of pay. Thereafter, the member contribution rate is 40% of the actuarially required contribution rate.

State's Required Contribution Rate

For the fiscal year beginning July 1, 2008, and for each subsequent fiscal year until the system attains fully funded status, thirty and six-tenths percent of pay. Commencing with the first fiscal year in which the system attains fully funded status, and for each subsequent fiscal year, the percentage rate equal to sixty percent of the actuarially required contribution rate.

Annuity for Senior Judges and Retired Senior Judges

(a) Judges retiring and becoming Senior Judges before January 1, 1993:

The annuity for all senior judges or retired senior judges will be equal to 3% of the current base salary of the office in which the judge last served before retirement as a judge or senior judge, multiplied by the judge's years of service prior to retirement as a judge, subject to a maximum of 50% of such current base salary.

(b) Judges retiring and becoming Senior judges on or after January 1, 1993 and before July 1, 1994:

The annuity is the same as (a) above, except that the annuity will increase only until the year in which the judge attains age 78. At that point, it will remain the same until the judges' death.

(c) Judges retiring and becoming Senior Judges on or after July 1, 1994:

The annuity is the same as (b) above, except that the percentage increase of the annuity each year is only 75% of the amount that it would have been under (b).

(d) Judges retiring and becoming Senior Judges on or after July 1, 1998:

The annuity is the same as (c) above, except that the maximum benefit is 52% of the current base salary.

(e) Judges retiring and becoming Senior Judges on or after July 1, 2000:

The annuity is the same as (d) above, except that the maximum benefit is 56% of the current base salary.

(f) Judges retiring and becoming Senior Judges on or after July 1, 2001:

The annuity is the same as (e) above, except that the maximum benefit is 60% of the current base salary.

(g) Judges retiring and becoming Senior Judges on or after July 1, 2006: The percentage multiplier is 3.25% per year of service and the maximum benefit is 65% of the current base salary.

ACTIVE MEMBERS AS OF JULY 1, 2011

	Number of Employees			Annual Salary		
Age	Male	Female	Total	Male	Female	Total
under 30	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	1	2	3	122,400	244,800	367,200
40-44	7	4	11	902,700	520,200	1,422,900
45-49	15	7	22	1,927,800	912,900	2,840,700
50-54	23	9	32	3,146,700	1,193,400	4,340,100
55-59	35	10	45	4,753,200	1,346,400	6,099,600
60-64	50	13	63	6,742,200	1,739,100	8,481,300
65-69	13	1	14	1,769,700	122,400	1,892,100
70 & up	6	1	7	810,900	147,900	958,800
Totals	150	47	197	20,175,600	6,227,100	26,402,700

ACTIVE AGE / SERVICE DISTRIBUTION AS OF JULY 1, 2011

	Years of Service								
Age	0-4 Count	5-9 Count	10-14 Count	15-19 Count	20-24 Count	25-29 Count	30-34 Count	35+ Count	Total Count
under 30	0	0	0	0	0	0	0	0	**0**
30-34	0	0	0	0	0	0	0	0	**0**
35-39	1	2	0	0	0	0	0	0	**3**
40-44	9	2	0	0	0	0	0	0	**11**
45-49	13	4	4	1	0	0	0	0	**22**
50-54	12	5	8	6	0	1	0	0	**32**
55-59	7	9	13	10	3	3	0	0	**45**
60-64	6	11	14	15	5	10	2	0	**63**
65-69	0	2	3	3	3	1	2	0	**14**
70 & up	0	0	0	3	0	2	1	1	**7**
Totals	**48**	**35**	**42**	**38**	**11**	**17**	**5**	**1**	**197**

INACTIVE VESTED MEMBERS
as of July 1, 2011

	Number of Members			Annual Benefit		
Age	Male	Female	Total	Male	Female	Total
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	0	0	0	0	0
45-49	0	0	0	0	0	0
50-54	0	0	0	0	0	0
55-59	1	2	3	31,788	70,461	102,249
60-64	2	3	5	103,178	165,137	268,315
65-69	0	0	0	0	0	0
70 & up	0	0	0	0	0	0
Totals	3	5	8	134,965	235,598	370,564

RETIREES AND BENEFICIARIES
as of July 1, 2011

	Number of Members				Annual Benefit			
Age	Retired	Senior	Beneficiaries	Total	Retired	Senior	Beneficiaries	Total
under 55	1	0	2	3	89,505	0	89,505	179,010
55 to 59	3	0	3	6	172,460	0	172,460	344,921
60 to 64	3	13	1	17	225,406	1,043,295	225,406	1,494,108
65 to 69	6	15	2	23	262,309	1,188,871	262,309	1,713,489
70 to 74	13	8	7	28	627,121	558,145	627,121	1,812,387
75 to 79	18	6	5	29	798,747	453,456	798,747	2,050,951
80 to 84	24	2	8	34	1,174,125	152,656	1,174,125	2,500,906
85 to 89	10	0	11	21	343,535	0	343,535	687,071
90 to 94	1	0	10	11	46,474	0	46,474	92,949
95 to 99	0	0	3	3	0	0	0	0
100 & over	0	0	1	1	0	0	0	0
Totals	79	44	53	176	3,739,684	3,396,422	3,739,684	10,875,790

IOWA JUDICIAL RETIREMENT FUND
CERTIFICATION

We have prepared an actuarial valuation of the Iowa Judicial Retirement Fund as of July 1, 2011, for the fiscal year ending June 30, 2012. The results of the valuation are set forth in this addendum, which reflects the benefit provisions in effect on July 1, 2011.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete, or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The results in this Addendum have been prepared for the sole purpose of providing the information required under Chapter 97 D.5 of the Iowa code. Calculations are based on the following prescribed methods:

Actuarial cost method: Entry Age Normal
Amortization method: Level percent of payroll
Amortization period: 30 years, open period

All other assumptions, methodologies, and System provisions used are consistent with those used in the regular July 1, 2011 valuation for the Iowa Judicial Retirement Fund.

The results shown in this Addendum are not consistent with those in the regular July 1, 2011 valuation. The July 1, 2011, valuation results were determined in accordance with generally accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying opinion and supporting recommendations of the American Academy of Actuaries. The results shown in this Addendum are not necessarily based on the methodologies adopted by the System.

We are available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Patrice Beckham

Patrice A. Beckham, F.S.A. Date

Brent A. Banister

Brent A. Banister, F.S.A. Date

IOWA JUDICIAL RETIREMENT FUND
SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED METHODOLOGY

This addendum report has been prepared to present the results of a valuation of the State of Iowa Judicial Retirement Fund as of July 1, 2010, based on the prescribed methodology under current statutes and regulations issued thereunder.

The unfunded actuarial accrued liability has been amortized as a level percent of payroll over 30 years. The payroll growth assumption used was 4%.

A summary of principal valuation results from the current and the prior valuation follows.

	Actuarial Valuation as of	
	July 1, 2011	**July 1, 2010**
Summary of Costs		
Normal cost at July 1	$ 5,577,516	$ 5,212,950
UAAL amortization	2,844,460	2,927,910
Total	8,421,976	8,140,860
Interest to Year End	631,648	610,565
Total Actuarially Required Contribution at Year End	9,053,624	8,751,425
Less Employee contributions with interest	2,559,553	2,470,066
State Required Contribution	6,494,071	6,281,359
Expected Payroll FYE	$ 26,402,700	$ 25,479,600
State Actuarially Required Contribution Rate	24.60%	24.65%
Funded Status		
Actuarial accrued liability	$164,511,490	$156,029,125
Actuarial value of assets	109,511,743	99,415,804
Unfunded actuarial accrued liability	$ 54,999,747	$ 56,613,321
Funded ratio	66.57%	63.70%
Asset Values		
Market value of assets	$111,571,876	$ 91,321,799
Actuarial Value of Assets	$109,511,743	$ 99,415,804